THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants:

Groux, et al.

Appl. No.:

10/622,115

Conf. No.:

1635

Filed:

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Title:

MILK PRODUCT WHICH CAN BE FOAMED BY SHAKING

Art Unit:

1794

Examiner:

Jyoti Chawla

Docket No.:

3712036-00486

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

APPELLANTS' REPLY BRIEF

Sir:

I. **INTRODUCTION**

Appellants submit Appellants' Reply Brief in response to the Examiner's Answer dated January 24, 2010 pursuant to 37 C.F.R. § 41.41(a). Appellants respectfully submit that the Examiner's Answer has failed to remedy the deficiencies with respect to the final Office Action dated May 14, 2010 and the Advisory Action dated August 19, 2010, as noted in Appellants' Appeal Brief filed on October 28, 2010, for at least the reasons set forth below. Accordingly, Appellants respectfully request that the rejection of pending Claims 1, 3-4, 9-12 and 15-17 be reversed.

II. THE REJECTION OF CLAIMS 1, 3-4, 9-11, 15 AND 17 UNDER 35 U.S.C. §103(a) SHOULD BE REVERSED BECAUSE THE EXAMINER HAS FAILED TO ESTABLISH A PRIMA FACIE CASE OF OBVIOUSNESS

Appellants acknowledge the Examiner's clarification of Appellants' summary of the pending rejections at Statement 2 of the Grounds of Rejection section of Appellant's Appeal Brief filed on October 28, 2010. In this regard, Appellants acknowledge that Claim 14 should be removed from same since Claim 14 was previously canceled.

Appellants also respectfully request that the Board reverse the rejection of Claims 1, 3-4, 9-11, 15 and 17 under 35 U.S.C. §103(a) because the Examiner has still failed to establish a prima facie case of obviousness with respect to the cited references.

In the Examiner's Answer, and in response to Appellants assertion that the cited references fail to disclose or suggest each and every element of the present claims, the Examiner argues that "[A]ppellant[s] are referred to the rejection of [the claims] . . . where it is clearly pointed out that *Petricca* teaches . . . about 20-30% fat by weight[,] . . . 0.5 to 2.5 and up to 4% dispersible protein[,] . . . 0.1 to 0.75% by weight of thickeners[, and] . . . 45-60% water." See, Examiner's Answer, page 21, line 16-page 22, line 6. However, Appellants respectfully submit that asserting what *Petricca* teaches does not remedy the fact that *Petricca* still fails to disclose or suggest the presently claimed amounts of unsaturated monolgyceride. In fact, despite the Examiner's confusing statement that "the limitation of unsaturated monoglycerides is addressed by *Petricca* and *Staackmann*," the Examiner admits that *Petricca* fails to disclose or suggest the presently claimed amounts of unsaturated monoglycerides. See, Examiner's Answer, page 22, lines 21-22; and page 23, lines 3-5.

In response to Appellants assertion that *Staackmann* and *Igoe* fail to remedy the deficiencies of *Petricca*, the Examiner further states that "it is noted that appellant[s are] arguing against the references individually" and that "one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references." See, Examiner's Answer, page 22, lines 16-19. In response, however, Appellants respectfully submit that, to the extent that each cited reference was discussed individually, the discussion of the references was not to address the issue of novelty under 35 U.S.C. §102, but rather to illustrate, in part, the differences between the individual references and reasons why the cited references fail to disclose each and every element of the present claims. Appellants respectfully submit that

it is the rejection itself that forced Appellants to respond in such a manner. Further, if each individual reference fails to disclose or suggest the same element of the present claims, then the references alone, or in combination, are deficient with respect to the present claims. Here, each reference cited fails to disclose or suggest the presently claimed amounts of unsaturated monoglycerides. As such, the Examiner has failed to establish a *prima facie* case of obviousness.

In the Examiner's Answer, the Examiner admits that *Petricca* fails to teach the presently claimed amounts of unsaturated monoglycerides, but states that "*Staackmann* discloses . . . unsaturated monoglycerides and combinations thereof in the amount of 0.1%." See, Examiner's Answer, page 23, lines 3-12. Appellants submit, however, that monoglycerides in an amount of 0.1% does not fall within the presently claimed ranges of 0.005 to 0.015% unsaturated monoglycerides as recited, in part, by independent Claim 1. Indeed, 0.1% is much larger than 0.005 to 0.015% as is noted in Appellant's Appeal Brief. Further, composition A of *Staackmann* clearly discloses a "[m]ixture of mono and diglycerides" in the amount of 0.1%, which the Examiner asserts overlaps the presently claimed range of 0.005% to 0.15% unsaturated monoglycerides by weight. Because the specific amounts of each of the mono and diglycerides are not known, it cannot be determined how much of the "mixture" comprises monoglycerides. Therefore, *Staackmann* fails to remedy the deficiencies of *Petricca*.

Similarly, *Igoe* also fails to remedy the deficiencies of *Petricca*. *Igoe* discloses definitions of Polyoxyethylene (20) Sorbitan Monostearate and Polyoxyethylene (20) Sorbitan Tristearate. See, *Igoe*, page 111. At no place in the disclosure does *Igoe* disclose or suggest the presently claimed amounts of any unsaturated monoglycerides. Therefore, *Igoe* also fails to remedy the deficiencies of *Petricca*. Accordingly, it is clear that the cited references fail to disclose or suggest each and every element of the present claims.

With respect to Appellant's assertion that the skilled artisan would have no reason to combine the cited references to arrive at the present claims, the Examiner continues to assert that *Petricca* teaches a product comprising sodium caseinate and the addition of milk. See, Examiner's Answer, page 25, lines 16-21. However, as discussed in Appellants' Appeal Brief, *Petricca* teaches a <u>non-dairy (non-milk)</u> emulsion. Each example and each formulation described in *Petricca* reinforces the non-dairy nature of the emulsion. See, *Petricca*, column 2, Tables I and II, and columns 5-8, Examples 1-6. Though milk is mentioned in *Petricca*, it is

only taught as a diluent for the finished product emulsion. Therefore, milk is not part of the emulsion invention of *Petricca*. Even the "disperable protein" of the emulsion is disclosed as sodium caseinate, which is a milk derivative that is not a source of lactose and therefore an ingredient generally used in non-dairy products. In fact, Section 101.4(d) of Title 21 of the Code of Federal Regulations allows foods containing sodium caseinate to be labeled as non-dairy.

Appellants further reiterate that the fact that *Petricca* states that the emulsion may be diluted with milk does not change the fact that the entire reference, when viewed as a whole, is directed to a <u>non-dairy (non-milk)</u> emulsion. Indeed, the courts are clear that each reference in an obviousness rejection must be considered <u>as a whole</u> and those portions teaching against or away from each other and/or the claimed invention must be considered. *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve Inc.*, 796 F.2d 443 (Fed. Cir. 1986). "A prior art reference may be considered to teach away when a person of ordinary skill, upon reading the reference would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the Applicant." *Monarch Knitting Machinery Corp. v. Fukuhara Industrial Trading Co., Ltd.*, 139 F.3d 1009 (Fed. Cir. 1998), quoting, *In re Gurley*, 27 F.3d 551 (Fed. Cir. 1994).

Moreover, each example and each formulation described in *Petricca* reinforces the <u>non-dairy</u> nature of the emulsion. See, *Petricca*, column 2, Tables I and II, and columns 5-8, Examples 1-6. As such, although milk is mentioned in *Petricca*, it is only taught as a diluent for the finished emulsion product. Therefore, milk is not part of the emulsion invention of *Petricca*.

In contrast to *Petricca*, *Staackmann* is entirely directed to providing a <u>dairy</u> product having storage stability and resistance to microbiological attack at <u>room temperature</u>. See, *Staackmann*, column 1, lines 49-68. Therefore, *Petricca* teaches essentially a <u>non-dairy</u> food product, which teaches away from *Staackmann*.

The Examiner argues that "[A]ppellant is referred to claim 1 as recited, wherein the claimed invention does not require any 'milk' or specific milk product or any milk component in the composition." See, Examiner's Answer, page 26, lines 6-7. In contrast, however, Appellants note that Claim 1 is entirely directed to a "milk product" and the phrase "milk product" is repeated at least four times in the claim. Therefore, because *Petricca* is entirely directed to a non-dairy (non-milk) product, *Petricca* also teaches away from the presently claimed milk products.

In sum, Appellants respectfully submit that the Examiner continues to pick and choose selected portions of the cited references to arrive at the present claims. However, not only do the cited references fail to disclose or suggest each and every element of the present claims, but when the references are properly considered as a whole, there exists no reason why the skilled artisan would combine the cited references to achieve the claimed invention. For at least the reasons discussed above, Appellants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness.

Therefore, for at least the reasons discussed above, Appellants respectfully submit that Claims 1, 3-4, 9-11, 15 and 17 are novel, nonobvious and distinguishable from the cited references and are in condition for allowance.

Accordingly, Appellants respectfully request that the obviousness rejection of Claims 1, 3-4, 9-11, 15 and 17 be reconsidered and withdrawn.

III. THE REJECTION OF CLAIMS 12 AND 16 UNDER 35 U.S.C. §103(a) SHOULD BE REVERSED BECAUSE THE EXAMINER HAS FAILED TO ESTABLISH A PRIMA FACIE CASE OF OBVIOUSNESS

Appellants respectfully request that the Board reverse the rejection of Claims 12 and 16 under 35 U.S.C. §103(a) because the Examiner has still failed to establish a *prima facie* case of obviousness with respect to the cited references.

With respect to Appellants' fails to disclose argument, the Examiner maintains that the rejections of Claims 1 and 12 as being unpatentable over *Petricca*, *Igoe* and *Staackman* renders the claims obvious. See, Examiner's Answer, page 33, lines 20-21. However, as discussed in the previous section, for at least the same reasons discussed above with regard to independent Claim 1, *Petricca*, *Igoe* and *Staackmann* fail to disclose or suggest a milk product comprising 0.3 to 3% propylene glycol monostearate (PGMS) by weight, 0.005 to 0.15% sorbitan tristearate (STS) by weight, and 0.005 to 0.015% unsaturated monoglyceride by weight as required, in part, by independent Claim 12. Appellants submit that *Anderson* fails to remedy the deficiencies of *Petricca*, *Igoe* and *Staackmann*.

The Examiner relies on *Anderson* to teach the method steps adding emulsifiers to skim milk and then adding cream as a source of fat to the emulsion. See, final Office Action, page 15, line 10 to page 16, line 17. Moreover, *Anderson* teaches adding about 0.4% to about 1.0% by

weight of an added monoglyceride emulsifier to the dairy product of *Anderson*. See, *Anderson*, Claim 1; column 2, lines 35-43; and column 3, lines 12-21. The monoglyceride levels taught in *Anderson* clearly exceeds the range of the present claims. Therefore, *Anderson* fails to remedy the deficiencies of *Petricca*, *Igoe* and *Staackmann*. As such, Appellants respectfully submit that the cited references fail to disclose or suggest each and every element of the present claims.

With respect to Appellant's argument that the skilled artisan would have no reason to combine the cited references, the Examiner maintains the same arguments as applied above in Section II of this Reply Brief. See, Examiner's Answer, page 33, line 17-page 34, line 5. Appellants respectfully disagree and submit that the skilled artisan would have no reason to combine the cited references. For example, *Petricca* is entirely directed to a pourable, whippable, edible emulsion containing water, fat, sweetener, protein, thickener, buffer and emulsifiers. See, *Petricca*, Abstract. As a result, *Petricca* teaches a non-dairy (non-milk) emulsion. Each example and each formulation described in *Petricca* reinforces the non-dairy nature of the emulsion. See, *Petricca*, column 2, Tables I and II, and columns 5-8, Examples 1-6. Though milk is mentioned in *Petricca*, it is only taught as a diluent for the finished product emulsion, as is discussed in detail above. Therefore, milk is not part of the emulsion invention of *Petricca*.

In contrast to *Petricca*, *Staackmann* is entirely directed to providing a <u>dairy</u> product having storage stability and resistance to microbiological attack at <u>room temperature</u>. See, *Staackmann*, column 1, lines 49-68. Similarly, *Anderson* is entirely directed to providing a shelf-stable aseptic <u>dairy</u> product. See, *Anderson*, Abstract. Therefore, *Petricca* teaches essentially a <u>non-dairy</u> food product, which not only teaches away from *Staackmann*, but also teaches away from *Anderson* and the present claims, which are directed to a milk product. As such, the skilled artisan would have no reason to combine *Petricca*, *Igoe*, *Staackmann* and *Anderson* to arrive at the present claims.

Appellants further note that *Anderson* also teaches away from the presently claimed amounts of unsaturated monoglycerides. For example, *Anderson* expressly teaches that the added emulsifier is used in an amount of about 0.4% to about 1.0%, and states that "[i]f less than about 0.4% of the emulsifier is used, the destabilizing effect . . . which allows for whippability is not satisfactory." See, *Anderson*, column 4, lines 42-54. Since the present claims recite, in part, unsaturated monoglycerides in an amount of about 0.005 to 0.015%, *Anderson* expressly teaches

away from the present claims by stating that such amounts of unsaturated monoglycerides would produce a whippability that "is not satisfactory."

Accordingly, Appellants submit that *Petricca, Igoe*, *Staackmann* and *Anderson*, alone or in combination, fail to disclose or suggest each element of the rejected claims and are not combinable because the references teach away from each other and are directed toward products having completely different objectives.

Accordingly, Appellants respectfully request that the obviousness rejections with respect to Claims 12 and 16 be reconsidered and the rejections be withdrawn.

IV. CONCLUSION

For the foregoing reasons, Appellants respectfully submit that the Examiner's Answer does not remedy the deficiencies noted in Appellants' Appeal Brief with respect to the final Office Action and Advisory Action. Therefore, Appellants respectfully request that the Board of Appeals reverse the obviousness rejections with respect to Claims 1, 3-4, 9-12 and 15-17.

No fee is due in connection with this Reply Brief. The Director is authorized to charge any fees that may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 3712036-00486 on the account statement.

Respectfully submitted,

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